

In re Appln of Thomas M. Mayers et al
Application No. 10/789,000
Response to Notice of Non-Compliant Amendment (37 CFR 1.121)
mailed January 24, 2008

Listing of Claims:

Claim 1 (Amended). An abuse-resistant, cast acoustical ceiling tile having a core made from a starch gel and mineral wool fiber composition with the starch gel ranging from 75 to 83 weight percent of the core composition and the mineral wool fibers ranging from 17 to 25 weight percent of the core composition, wherein the front surface of the tile is coated with aggregate particles having an average particle mean diameter of at least about 1,000 microns.

Claim 2 (Original). The ceiling tile of claim 1 wherein the aggregate particles are selected from the group consisting of calcium carbonate, crushed marble, sand, clay, perlite, vermiculite, crushed stone and glass.

Claim 3 (Original). The ceiling tile of claim 2 wherein the aggregate particles are calcium carbonate.

Claim 4 (Original). The ceiling tile of claim 3 wherein the aggregate particles have an average particle mean diameter ranging from about 1,000 microns to about 3,000 microns.

Claim 5 (Original). The ceiling tile of claim 3 wherein the aggregate particles have an average particle mean diameter ranging from about 1,400 microns to about 2,500 microns.

Claim 6 (Original). The ceiling tile of claim 1 which has a noise reduction coefficient (NRC) value of at least about 0.50.

Claim 7 (Original). The ceiling tile of claim 2 which has a noise reduction coefficient (NRC) value of at least about 0.50.

Claim 8 (Original). The ceiling tile of claim 3 which has a noise reduction coefficient (NRC) value of at least about 0.50.

Claim 9 (Original). The ceiling tile of claim 4 which has a noise reduction coefficient (NRC) value of at least about 0.50.

Claim 10 (withdrawn). A process for making an abuse-resistant, cast ceiling tile wherein a wet mineral fiber/starch gel pulp is fed to a paper, foil or paper backed foil lined tray from a headbox;

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the pulp-filled tray is passed under a hopper which contains aggregate particles;

the aggregate particles are fed from the hopper onto the surface of the wet pulp in the tray so as to provide a uniform layer of aggregate particles across the surface of the wet pulp;

the wet pulp covered by a layer of aggregate particles is passed under a means to press the particles into the pulp; and

then the tray containing the aggregate particle covered wet pulp is passed into a drier.

Claim 11 (withdrawn). The process of claim 10 wherein the aggregate particles are fed from the hopper onto the surface of the wet pulp at a rate ranging from about 0.1 to about 1 pound per square foot of surface.

Claim 12 (withdrawn). The process of claim 10 wherein the aggregate particles are fed from the hopper onto the surface of the wet pulp at a rate ranging from about 0.2 to about 0.5 pound per square foot of surface.

Claim 13 (withdrawn). The process of claim 10 wherein the aggregate particles are calcium carbonate.

Claim 14 (withdrawn). The process of claim 11 wherein the aggregate particles are calcium carbonate.